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Thematic sexual and guilt responses as related to stimulus-relevance and experimentally induced drive and inhibition.

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THEMATIC SEXUAL AND GUILT RESPONSES AS RELATED TO
STIMULUS-RELEVANCE AND EXPERIMENTALLY INDUCED
DRIVE AND INHIBITION

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THEMATIC SEXUAL AND GUILT RESPONSES AS RELATED TO
STIMULUS-RELEVANCE AND EXPERIMENTALLY INDUCED
DRIVE AND INHIBITION

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Thesis submitted to the Graduate Faculty in partial
fulfillment of the requirements for the degree of
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Introduction

In a modification of Miller's (1951) theoretical conceptions of displacement and an adaptation to the Thematic Apperception Test, Epstein (see Epstein and Fenz, in press) indicates that it is necessary to consider the interaction of drive, inhibition and stimulus-relevance in accounting for responses to the test. Proceeding from this viewpoint, the present study investigates thematic sexual and guilt responses as related to stimulus-relevance and experimentally induced sexual drive and inhibition.

Thematic Apperception and Drive

In considering the relationship between a culturally restricted drive such as sex and its manifestation in a TAT-type test, inhibitory as well as drive factors must be considered. It is readily apparent that one should not expect free expression of the culturally taboo sex drive, either overtly or projectively, without some degree of conscious censorship or unconscious inhibition. Although inhibition can occur for other reasons, it seems safe to assume that guilt is one of its major sources. If little guilt is operating, the drive should express itself relatively directly, while if a high degree of guilt is operating the drive should be either inhibited or expressed indirectly.

Studies on both sex and aggression have demonstrated the necessity of considering inhibition as well as drive. Clark (1952) used two methods to induce sexual drive. In one, an alluring female experimenter was used; in the other, Ss were exposed to pictures of attractive nude females in a false pre-experiment. It was found

with both procedures that a control group produced more sexual imagery and sexual guilt in its stories than did the experimentally aroused groups. However, when sexual symbolism was investigated rather than direct sexual responses ^{CLARK AND SENSIBLER} (1955), the aroused groups produced more sexual symbols in its stories than the control group. When the experimental group was tested during a beer party, it produced more direct sexual responses than the control group. This was interpreted as indicating a lowering of the inhibitory gradient under alcohol. It was concluded that both drive and inhibition must be considered in understanding drive-related responses to a projective test.

Further evidence of the importance of inhibition in influencing thematic sexual responses comes from a study conducted by Mussen and Scodel (1955). Using a procedure similar to Clark's, they administered TAT cards to two groups of male college students who had been exposed to sexually-arousing stimuli (eight photographic slides of nude females). In one group, called Formal, the slides of nude females were presented by a "formal, professorial and somewhat stern man in his sixties" and in the other group, called Informal, the slides were presented by "a young-looking, informal, permissive graduate student" (p. 90). It was found that the Informal group produced significantly more sexual responses on the TAT than the Formal group. Thus, the authors conclude that "arousal of socially disapproved needs in the presence of an authority figure results in greater inhibition of subsequent expression of that need than the arousal of the same need in a permissive situation" (p. 90).

In view of the above study, careful examination of the particular instructions, stimuli and tasks used by Clark suggests that they played an important role in the production of inhibition. In the experimental condition which utilized slides of nude females, the stimuli were art-photography nudes. It seems quite possible that the instructions, which called for an analytic "scientific" attitude were inhibiting when considered in relation to the blatancy of the completely exposed female body. In Clark's experimental condition where an attractive female was used as administrator of the TAT, an effort was made to emphasize her sexually stimulating characteristics. It was Clark's contention that the presence of an attractive female examiner would elicit a type of sexual fantasy less apt to be guilt ridden in nature than that resulting from the viewing of slides of nude females. On the other hand, this situation, which employed a female who was representing a member of the university faculty acting in an academic capacity, might very well result in inhibitory tendencies. Thus, it appears quite reasonable to view Clark's experimental conditions as facilitating inhibition rather than expression of sexual responses. In addition, it should be noted that Clark had neglected to control for TAT n Sex when he found that an experimental group produced fewer ~~sexual responses~~ and sex-related guilt responses than a control group (before alcoholic consumption). Since sexual guilt could only occur in relation to sexual responses, the interpretation of the findings on guilt must be questioned, for it is evident that a group relating strong sexual responses has more of an opportunity for producing sexual guilt responses.

A Conflict Theory

In addition to drive and inhibition, a third factor, the relevance of the stimulus, must be considered as it is assumed to influence the balance between expression and inhibition. Figure 1, which is based upon Epstein's (Epstein and Smith, 1956, Epstein and Fenz, in press) modification of Dollard and Miller's conflict theory (1950) and its adaptation to projective techniques, illustrates the tendencies to express and inhibit as a function of the need-relevance of the stimulus cues. As the gradient of inhibition is represented as steeper than the gradient of expression, it follows that with increasing stimulus-relevance, a drive-aroused group should manifest an increasing tendency to produce drive-related responses up to point "b", after which the tendency should decrease, until at point "c" it should not differ from a non-drive-aroused group. From point "c" to "d", the drive-aroused group should manifest an increasing tendency to under-respond.

It should be noted that in the previously described studies by Clark (1952) and by Mussen and Scodel (1955), no cognizance was taken of the stimulus-relevance of the TAT cards.

Statement of the Problem

It is assumed that in order to account for projective behavior, the intensities of both drive and inhibition must be considered. That is, projective techniques function as they do, not because inhibition does not occur, but because it enters to a lesser degree than in overt behavior. As a framework for investigating thematic sexual and guilt responses as a function of stimulus-relevance,

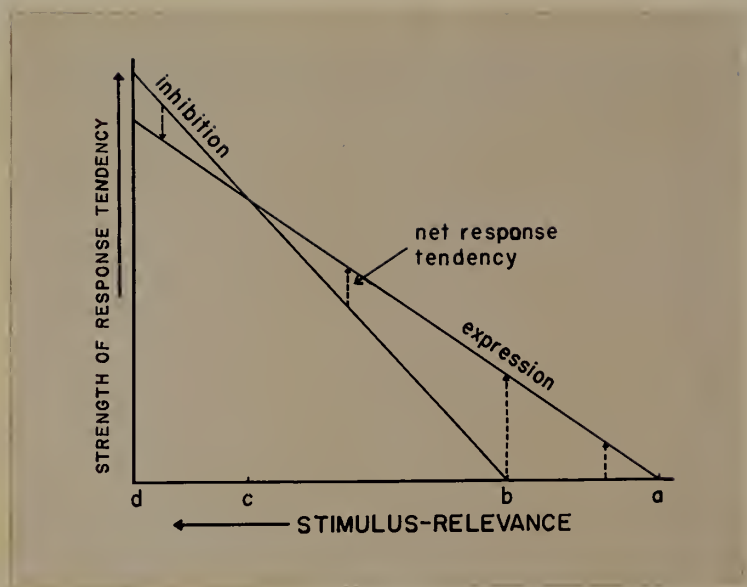


Fig. 1. Conflict model.

experimentally induced sexual drive, and inhibition, the following predictions were made:

1. Over all levels of inhibition, groups under higher experimentally induced sexual drive will obtain higher n Sex scores than groups under lower experimentally induced sexual drive. This is based on the assumption that, to some extent, people's drive states are projected in thematic responses.

2. Over all levels of drive, groups under high experimentally induced inhibitory set conditions will obtain lower n Sex scores than groups under low experimentally induced inhibitory set conditions. This is based on the assumption that inhibition as well as drive influences thematic responses.

3. Groups relatively high in inhibition will not demonstrate as marked a relationship between drive and thematic responses as groups relatively low in inhibition. This is based on the assumption that inhibition exerts a relatively greater effect on the strong response tendencies produced by high drive than on the weaker response tendencies produced by low drive (See Fig. 2).

4. Pictures of low stimulus-relevance will discriminate levels of drive more effectively than pictures of high stimulus-relevance. This is based on the assumption that the gradient of expression is less steep than the gradient of inhibition (See Fig. 3).

5. Pictures of high stimulus-relevance will discriminate levels of inhibition more effectively than pictures of low stimulus-relevance. This is based on the assumption that the gradient of inhibition is steeper than the gradient of expression (See Fig. 4).

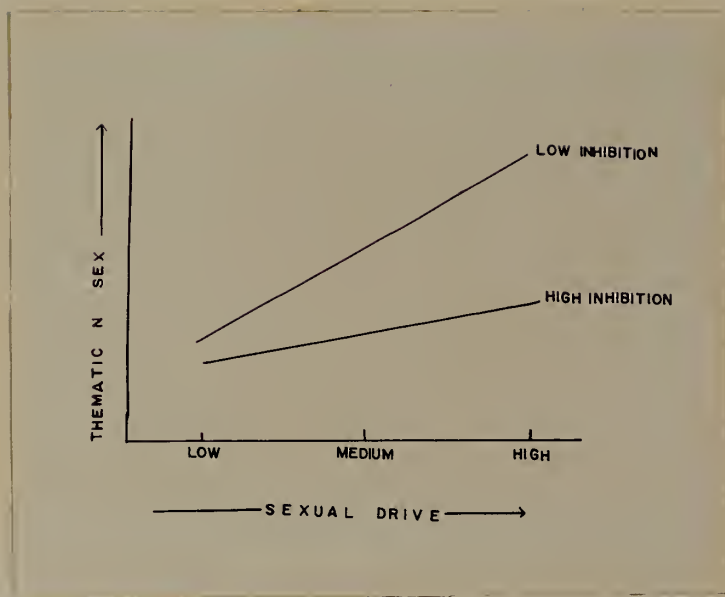


Fig. 2. Graphic representation of prediction 3.

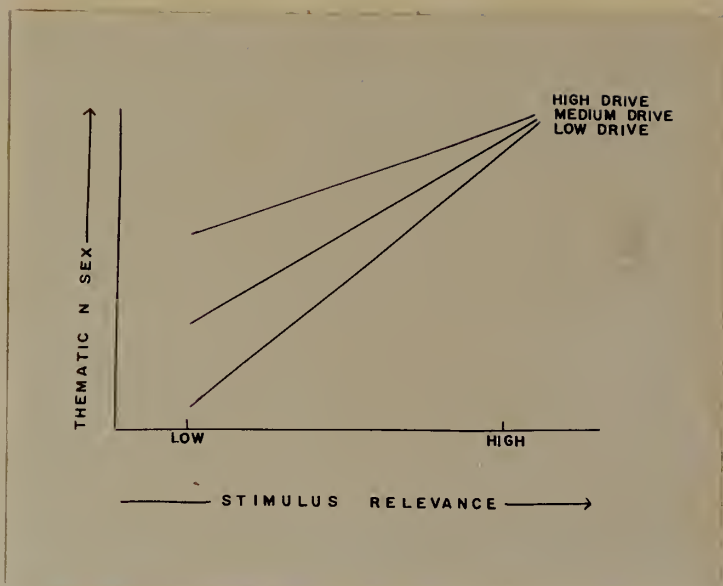


Fig. 3. Graphic representation of prediction 4.

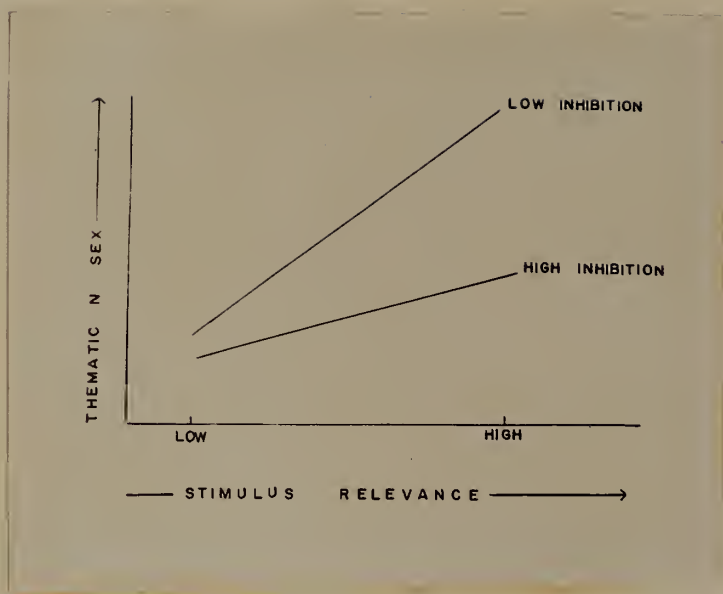


Fig. 4. Graphic representation of prediction 5.

6. Over all levels of drive, groups under experimentally induced high inhibition will obtain higher thematic guilt scores than groups under low inhibition. This is based on the assumption that guilt is projected in thematic responses.

Method

Subjects

All subjects (Ss) were unmarried male undergraduates between eighteen and twenty-two years of age enrolled in the general psychology course at the University of Massachusetts. They were selected from a pool of students who volunteered to participate in psychological experiments during the course of the semester in order to receive extra credit. They were tested early in the semester before having an opportunity to learn about projective techniques.

Experimentally Induced Sexual Drive and Inhibition

Six different groups of Ss were employed in the course of the investigation. The two variables which defined the groups were experimentally induced drive and experimentally induced inhibitory set. The six groups consisted of combinations of three levels of induced drive with two levels of inhibitory set.

Experimentally Induced Drive. The induced drive variable consisted of the presentation of three levels of sexually arousing pictorial stimuli. The stimuli were selected as follows: Ten male judges, consisting of staff members at a V.A. mental hygiene clinic and graduate students in psychology, were asked to sort a large number of photographs of women into three separate groups on the basis of their sexually stimulating quality. The judges were instructed to place in one group the photographs they felt were highly sexually stimulating, in a second group those that were moderately sexually stimulating, and in a third group those they felt were least stimulating. The judges sorted the photographs independently.

Four photographs at each of the three levels of arousal were selected which represented complete agreement on the part of the judges. The highly sexually arousing pictorial stimuli all turned out to be of art photography nudes, the medium of scantily attired "pin-up" or "cheesecake" pictures, and the low of fully clothed everyday women (See Appendix A).

Experimentally Induced Inhibitory Set. The inhibitory set variable consisted of an experimental condition designed to minimize the occurrence of inhibition and an experimental condition designed to maximize the occurrence of inhibition. In order to minimize inhibition the following was done in an effort to make sexual feelings and expression as appropriate and as acceptable as possible. The author, a male graduate student, served as the pre-test experimenter (administrator of the sexually stimulating slides) and maintained a casual and permissive, "one of the boys", attitude throughout the administration of the pre-test condition. The following instructions, which were formulated to make the presentation of the slides plausible to the Ss, were designed to contribute to the permissive atmosphere:

"This study is aimed at understanding more about sexual attractiveness. We are particularly interested in discovering whether there is any agreement as to what makes women sexually attractive to young men in our culture and whether there is agreement between different cultures.

"I have four slides of (nude) (pin-up type) (attractive) females. These pictures were obtained from (art photography collections) (magazines) (magazines).

"The study is completely in the interests of science. However, if you object to taking part in a study of sex, please feel free to leave now or any other time.

You will still be given half-credit, that is, credit for serving as a subject for half an hour.

"On your answer sheet you will see a line-rating scale (this was explained). The first time I show you the slides I want you only to think about the girls' sex appeal. Then the slides will be shown again for a few seconds each, at which time you can quickly make some comments about what it is about a particular girl you like most, such as her facial expression, the shape of her breasts, or comments as to how passionate you feel the girl would be, or things like that.

"I think that you will find that most of these pictures are of at least fairly attractive girls. We have purposely included only fairly attractive girls. So when you use the rating scale, don't be concerned if many of the ratings fall towards the attractive end of the scale. Your job is to judge the sexual attractiveness of these girls. To do this imagine yourself with the girl under conditions where you would not feel moral restraint, for example, if you were married to her and it was your honeymoon night. In short, I would like you to give your natural reactions to the girls rather than be overly analytic about it. Just let yourself go and rate your natural reactions."

In addition, Ss were told that it was not necessary for them to write their names on the pre-test papers.

In order to maximize inhibition it was considered necessary to diminish the permissibility and legitimacy of the Ss to enjoy the viewing of the sexually arousing slides. The following was done in an effort to make sexual feelings as inappropriate and as unacceptable as possible. A 42 year old woman graduate student served as the pre-test experimenter. She was conservatively dressed and maintained a strict, business-like attitude throughout the administration of the pre-test condition.¹ The following instructions were

1. This pre-test experimenter, a physically large woman, who is an ex-school teacher, reported no difficulty in assuming and maintaining a stern and forceful appearance during the administration of the test.

designed to make the presentation of the slides plausible and to contribute to the non-permissive atmosphere:

"This study is aimed at understanding more about sexual attractiveness. We are particularly interested in discovering whether there is any agreement as to what makes women sexually attractive to young men in our culture and whether there is any agreement between different cultures.

"I have four slides of (nude) (pin-up type) (attractive) females. These pictures were obtained from (art photography type collections) (magazines) (magazines). The slides were selected not because we were concerned about making the task more enjoyable for you, but because these are the only ones presently available.

"The study is completely in the interests of science. However, if you object to taking part in such a study for any reason whatever, please feel free to leave now or at any other time. You will still be given half-credit, that is, credit for serving as a subject for half an hour.

"On your answer sheet you will see a line-rating scale (this was explained). The first time I show you the slides I want you only to think about the girl's sex appeal. Then the slides will be shown again for a few seconds each, at which time you can quickly make your judgments on the rating scale. If you like you can make some adult types of comments about the particular girls.

"I think you will find that these pictures are of at least fairly attractive women. So when you use the rating scales, don't be concerned if many of the ratings fall toward the attractive end of the scale; but try to make fine discriminations among the more attractive women. Now remember your job is to judge the attractiveness of these women, but I want you to keep in mind that this is a serious scientific study and therefore it requires objective, analytical thought. Take the task seriously. Under no circumstances are you to call out, laugh or influence anyone else. In short, act mature.

"Be sure to write your name clearly on your answer sheet because it will be used as an attendance check."

TAT Stimulus Material

The TAT-type test consisted of six specially designed pic-

tures arranged along a dimension of stimulus-relevance for the sexual drive. The pictures, with slight modifications in Pictures 3 and 4, had previously been used by Leiman (1961) in a study with a similar population. Eighteen percent and 24% of the Ss used in Leiman's study responded with a sexual theme to Pictures 1 and 2, respectively, which were selected in the present study as low-relevant pictures; 52% and 37% of Leiman's Ss responded with a sexual theme to Pictures 3 and 4, respectively, which were selected as medium-relevant pictures; 92% and 99% of Leiman's Ss responded with a sexual theme to Pictures 5 and 6, respectively, which were selected as high-relevant pictures. Picture 3 was slightly modified in the present study by having the man on the park bench looking at his wrist watch and Picture 4 was modified by straightening the lines of the two figures walking along a dirt road in order to give them a more youthful appearance. The modifications were made in order to slightly raise stimulus-relevance. Pictures were presented in the order of increasing sexual relevance so that generalization of sexual responses from one picture to the next would be at a minimum. The pictures, in order of presentation, were: (See Appendix B for reproductions of pictures)

1. A young man is sitting on a dock. Judging by the sky, it is early evening or morning.
2. A young man is striding through a doorway in a house.
3. A young man is sitting on a park bench at night, and is looking at his wrist watch.
4. Two figures are walking along a dirt road. Their sex is ambiguous.

5. A young man and woman are lying on the ground in a scenic setting. They are possibly studying together, as one is holding a book. They may be about to make love.
6. A man, lying on a bed, is holding and kissing a woman who is leaning over him.

The procedure for presenting the TAT-type test was the same as that followed by Atkinson and McClelland (1948). Subjects were told that they were participating in a test of creative imagination (See Appendix C for instructions). Each picture was exposed for twenty seconds, and then a four minute period was allowed for writing.

Experimental Procedure

The experimental procedure consisted of two parts: 1) the pre-test condition which involved inducing sexual drive and inhibition and, 2) the presentation of a TAT-type test. The following procedure was utilized in order to minimize the possibility that the Ss would become aware of the fact that in the pre-test groups they were being intentionally stimulated for the purpose of measuring their reactions to the TAT.

One of the pre-test experimenters (administrator of the sexually arousing slides) and the TAT administrator² initially met the Ss. The TAT administrator introduced himself and the pre-test experimenter. He pointed out that he and another experimenter (pre-test administrator) were both doing research, and since their tasks required only about a half hour each, it would be less of an imposition on the student's time than serving as Ss for two separately scheduled

2. A male graduate student administered the TAT to all groups. He presented the TAT in the same manner to all groups.

experiments as they would receive separate credit for the two experiments. After these introductory remarks, the TAT administrator left the room. Three groups were exposed to low, medium and high sexually arousing slides, respectively, under conditions designed to minimize the occurrence of inhibition, and three different groups to the same slides under conditions designed to maximize the occurrence of inhibition. After Ss rated the slides on the line rating scales, the first experimenter collected the papers, packed up the slides, thanked the TAT administrator, who had returned, for the use of the time, and left the room. In addition to gaining rapport, the introductory remarks and procedures served to convey the impression that there were two distinct experiments.³ Following the pre-test procedure, the other experimenter administered the TAT in the manner which has been previously described.

Summary of Procedure

1. Three groups of Ss were each presented with one of three different sets of slides of females representing three levels of sexual stimulation. Half of each group was presented the slides under conditions designed to maximize inhibition and half under conditions designed to minimize inhibition.

2. All Ss were then presented with a TAT-type test made up of pictures arranged along a dimension of stimulus-relevance in

3. On a questionnaire administered to all Ss after the experiment was concluded, only two Ss indicated they suspected a connection between the pre-test experiment and the administration of the TAT. The TAT protocols of these Ss were not used in the study.

regard to sexual drive.

Definition of Groups

Subjects were run in groups of 10 or more until at least 20 had taken the TAT-type test under each of the six experimental conditions (three levels of drive x two levels of inhibition). The totals for the Ss who initially participated in the experiment in each of the six experimental groups were as follows: low-drive, low-inhibition, 26; medium-drive, low-inhibition, 22; high-drive, low-inhibition, 24; low-drive, high-inhibition, 23; medium-drive, high-inhibition, 24; high-drive, high-inhibition, 25. Two married Ss, two Ss who perceived a connection between the pre-test experiment and the administration of the TAT, and four Ss who did not fit the age limits were automatically eliminated. After eliminating these Ss the smallest group consisted of a total of 20 Ss. Subjects in the other groups were then eliminated by a table of random numbers to reduce all groups to 20 Ss.

Since the present study is in some ways a replication of Clark's (1952), which was conducted at Yale University, it was considered that an important difference might be that the Ss in the two studies differed in socio-economic status. Although Clark did not obtain data of this nature, it is assumed that Yale University undergraduates are apt to be of middle and upper socio-economic status. For the purpose of comparison of the two studies, Ss were asked to report their father's occupations (which the author then rated according to the classification used by Kinsey (1948) in establishing norms for male sexual behavior). The Ss were mainly

found to be from what might be considered the lower and middle socioeconomic classes. The frequency distribution of occupational categories for the six groups was approximately equal (See Appendix D for frequency distribution of father's occupational categories for the six groups).

Scoring of Thematic Responses

Need Sex. Need Sex (n Sex) is defined by Murray as the need "to seek and enjoy the company of the opposite sex. To have sexual relations. To fall in love, to get married" (1943, p. 10). Following a scoring system used by Leiman (1961), a weighted score of 0 to 5 was given to each story. Basic weights were first assigned as follows:

1. The slightest reference to marriage or romance ("They are man and wife", "They are on a date").
3. Reference to physical sexual contact other than sexual intercourse ("He wants to kiss her", "They are petting in the car").
5. Actual or implied sexual intercourse ("They are going to have sexual relations", "She has become pregnant").

Weighted scores of 2 and 4 were assigned to stories which were judged to fall between 1 and 3, and 3 and 5, respectively. Basic weights were modified up to one point within the 0 to 5 range according to intensity of the need, importance to the plot, frequency and duration. The experimenter and a graduate student who had previous experience in scoring thematic responses for n Sex independently scored the stories. Reliability (interscorer) for the weighted scores was .97 for all pictures combined for 100 Ss. Both scorers

scored the stories without knowledge of the drive and inhibition group each S was from. The experimenter's scores were used in the analysis of the data. Examples of stories receiving each of the weights are presented in Appendix E.

Sexual Guilt. TAT Sexual Guilt, based on a system used by Leiman and Epstein (in press), was divided into three categories, one in relation to internal forces, one in relation to external forces acting on the hero, and one involving misfortune following, but not a consequence of, sexual activity e.g., "He leaves the girl and on his way home he gets hit by a car". This subdivision is based on a continuum ranging from the most direct form of guilt to the least recognizable level. A weighted score of 0 to 5 was used within each level of guilt (See Appendix F for examples of stories given each weighted score):

Weights for internal guilt:

1. Someone is very slight^{ly} ashamed or embarrassed over sexual activity.
3. Someone is moderately guilty or anxious over sexual activity.
5. Someone is extremely guilty or anxious over sexual activity.

Weights for external guilt:

1. Someone is mildly criticized for sexual activity.
3. Someone is moderately criticized or punished for sexual activity.
5. Someone is severely punished for sexual activity.

Weights for indirect sexual guilt:

1. Someone has slight misfortune after sexual activity.
3. Someone has moderate misfortune after sexual activity.
5. Someone has severe misfortune after sexual activity.

Weighted scores of 2 and 4 were assigned to stories which were judged to fall in between 1 and 3, and 3 and 5, respectively. In the same manner as with n Sex, these weights were subject to modification according to intensity of guilt, importance to the plot, frequency and duration. Since, as it turned out, the data did not permit each score to be investigated separately due to the relatively few scores for the different guilt categories, they were combined into one overall guilt score. In order to accomplish this, internal guilt was multiplied by 5, external guilt by 3, and indirect guilt by 1, and the products summed. The differential weighting was based on the assumption that internal guilt was the clearest indication of guilt, whereas external and indirect guilt were increasingly more questionable. Reliability (interscorer) for the weighted score was .78 for the pooled pictures on the basis of a randomly selected group of 20 records.

Results

Thematic Sexual Responses and Sexual Drive

It had been predicted that over all levels of inhibition, there would be a direct relationship between thematic sexual responses and sexual drive as defined by the experimentally induced drive conditions. A n Sex score for each level of stimulus-relevance was obtained for each S by the addition of the scores for the two stories in each level of stimulus-relevance. The n Sex scores for the low, medium, and high-relevant pictures based on two pictures per level were then transformed to normalized standard scores per level of stimulus-relevance with means of 50 and standard deviations of 10 (McCall's T).⁴ A "split-plot" analysis of variance (Cochran and Cox, 1957) was then carried out. In Table 1, it can be seen that drive is associated with differences in thematic sexual responses to a significant degree ($F=7.48$, significant at the 1% level). In Fig. 4 and Table 2, it is seen that S s of low and medium-induced drive obtain approximately the same n Sex scores, with means of 9.13 and 9.10, respectively, while S s of high-drive produce a mean n Sex score of 11.35. The similarity of scores for low and medium-drive groups was not predicted and will be elaborated in the discussion section. It may be concluded that when low or medium-drive groups are compared to the high-drive group the relationship is direct, supporting the prediction.

Thematic Sexual Responses and Inhibition

It was predicted that over all levels of drive, there would be

⁴. For further description of the treatment of stimulus-relevance refer to the section on Stimulus-Relevance.

Table 1

Analysis of Variance of n Sex Scores as a Function of
Induced Drive, Inhibition and Stimulus-Relevance

Source	SS	df	MS	F
Drive	1,468.00	2	734.00	7.48**
Inhibition	1,127.00	1	1,127.00	11.48**
Drive X Inhibition	532.00	2	261.50	2.66
SS/Drive X Inhibition	11,193.00	114	98.18	
Stimulus-Relevance X Drive	224.00	4	56.00	.88
Stimulus-Relevance X Inhibition	35.00	2	17.50	.27
Stimulus-Relevance X Drive X Inhibition	243.00	4	60.75	.95
Residual Error	14,582.00	228	63.96	

** Significant at 1% level

Table 2

Mean Thematic Sex Score as a Function of Drive and
Inhibition (raw scores)

	Low- Drive	Medium- Drive	High- Drive	Mean Drive Pooled
Low-Inhibition	10.50	8.95	12.55	10.66
High-Inhibition	7.75	9.25	10.15	9.05
Mean Inhibition Pooled	9.13	9.10	11.35	

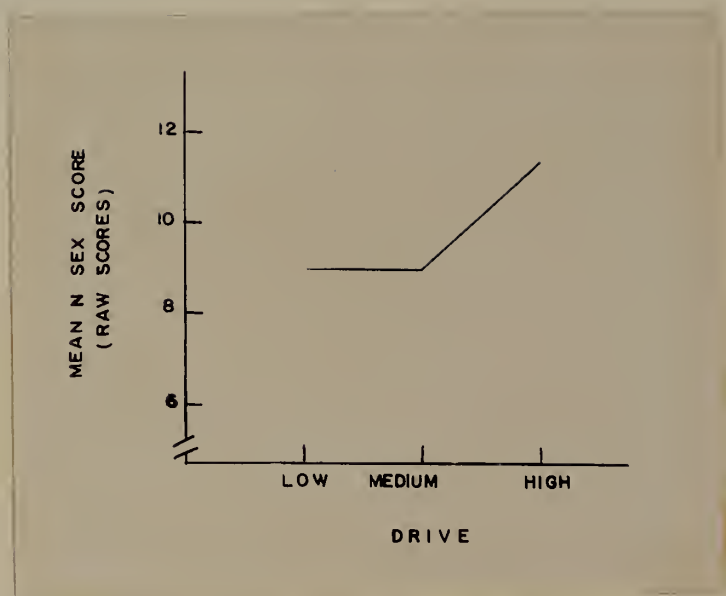


Fig. 4. Thematic sex responses as a function of drive. Values on the ordinate represent the total score on all six pictures.

an inverse relationship between thematic sexual responses and inhibition as defined by the experimentally induced inhibitory conditions. In Table 1, it can be seen that inhibition is associated with differences in thematic sexual responses to a significant degree ($F=11.48$, significant at the 1% level). Figure 5 and Table 2 indicate that the relationship is inverse. Thus, the prediction is substantiated.

Thematic Sexual Responses as a Function of the Interaction of Drive and Inhibition

A third prediction was that groups relatively high in inhibition would not demonstrate as marked a relationship between sexual drive and thematic sexual responses as would groups relatively low in inhibition. In Table 1, it can be seen that the drive x inhibition interaction is non-significant ($F=2.66$, $df=2$, $p>5\%$). The direction of the relationship is shown in Fig. 6 and Table 2. The low-inhibition group does not obtain relatively higher n Sex scores compared to the high-inhibition group from low to high drive. Thus, the prediction is not substantiated. The tendency toward an interaction effect is due to the u-shaped curve produced by the low-inhibition, low-drive group obtaining a higher n Sex score than the low-inhibition, medium-drive group. In evaluating this result it was considered that it might be due to an artifact resulting from the inconsistency of the instructions and the drive stimuli received by the low-drive, low-inhibition group, a point which will be elaborated in the discussion section. A ^{SECOND} ~~section~~ analysis of variance was carried out considering only medium and high-drive. An F of 3.29 was obtained which, with 1 df, approaches but does not reach significance ($p>5\%$). In

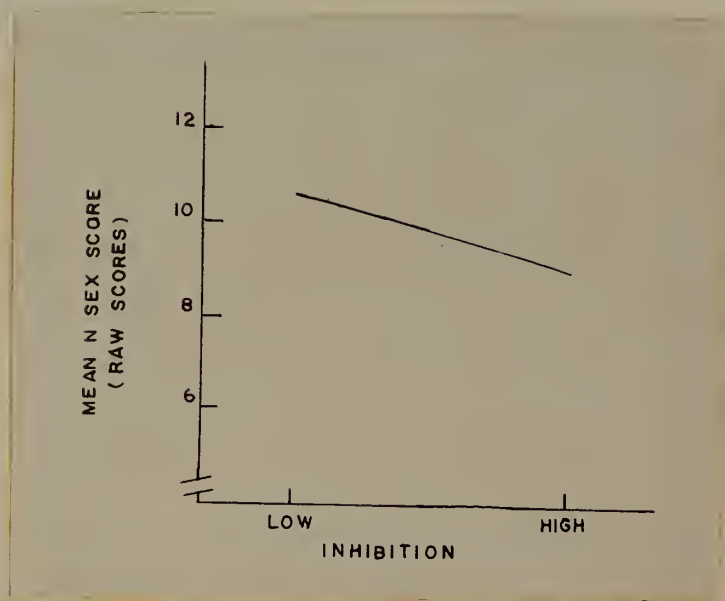


Fig. 5. Thematic sex responses as a function of inhibition. Values on the ordinate represent the total score on all six pictures.

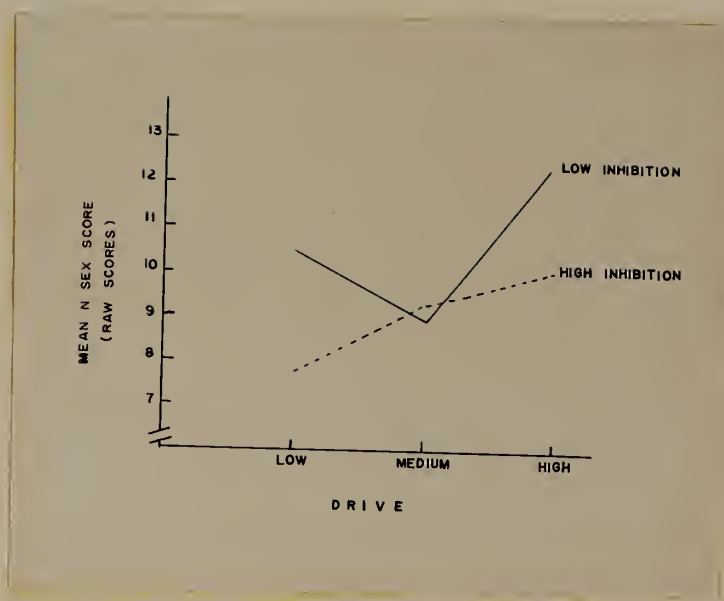


Fig. 6. Thematic sex responses as a function of drive and inhibition. Values on the ordinate represent the total score on all six pictures.

Fig. 6 it can be seen that groups under low-inhibition respond with relatively stronger thematic n Sex scores than groups under high-inhibition as drive increases from medium to high, which is in the predicted direction.

Stimulus-Relevance

To obtain a measure of stimulus-relevance, per cent of Ss giving sex-related responses (receiving a score of 1 to 5) was computed. The n Sex scores obtained across all groups were then pooled in obtaining the stimulus-relevance of each of the pictures. This was done even though the various experimental groups are expected to ^{AFFECT} effect sexual responding differently since interest was in obtaining overall measures of stimulus-relevance by which to assess relative differences in sexual responding as a function of pictures and experimental groups. The results were as follows: Picture 1, 32%; Picture 2, 20%; Picture 3, 73%; Picture 4, 86%; Picture 5, 97%; Picture 6, 100%. (For further descriptive data on individual pictures, See Appendix G). It was found that the frequency distributions of several of the individual pictures were too highly skewed to justify an analysis of variance using individual pictures. The pictures of low stimulus-relevance had a preponderance of zero scores, while the pictures of high stimulus-relevance were skewed in the opposite direction. It was therefore decided to combine pictures in the same category in order to obtain more adequate distributions. Before this was done, pictures were individually analyzed for the number of Ss above and below the median n Sex score for that picture. Since no picture significantly counteracted trends in other pictures

of the same category, responses to Pictures 1 and 2 were combined and averaged as a score for low-relevant pictures, responses to Pictures 3 and 4 were combined and averaged as a score for medium-relevant pictures and responses to Pictures 5 and 6 were combined and averaged as a score for high-relevant pictures.

It had been predicted that thematic sexual responses to pictures of low stimulus-relevance would discriminate among levels of drive more effectively than pictures of high stimulus-relevance. As can be seen in Table 1, the stimulus-relevance \times drive interaction is non-significant ($F=.86$). In Fig. 7, it can be seen that, if anything, the tendency is for high stimulus-relevance to separate the groups according to drive more effectively than low stimulus-relevance. This cannot be attributed to the questionable low-drive, low-inhibition group, since in Fig. 7 it can be seen that the increase in n Sex score for the medium and high-drive groups is about the same from low to medium to high stimulus-relevance. Thus, the prediction is not substantiated.

It had been predicted that thematic sexual responses to pictures of high stimulus-relevance would discriminate among levels of inhibition more effectively than pictures of low stimulus-relevance. As can be seen in Table 1, the stimulus-relevance \times inhibition interaction is non-significant ($F=.27$). In Fig. 8, it can be seen that the increase in n Sex scores from low to medium to high stimulus-relevance is about the same for the low and high-inhibition conditions. Thus, the prediction is not substantiated.

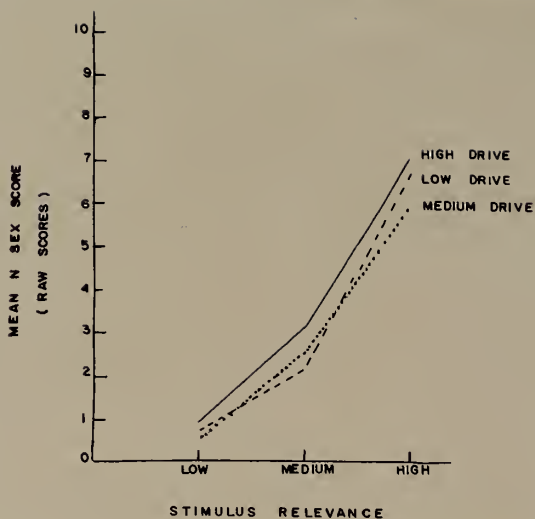


Fig. 7. Thematic sex responses as a function of drive and stimulus-relevance. Values on the ordinate represent the total score on two pictures at each level of stimulus-relevance.

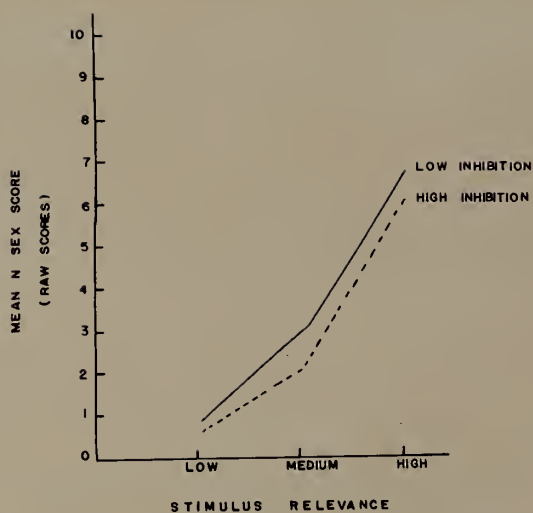


Fig. 8. Thematic sex responses as a function of inhibition and stimulus-relevance. Values on the ordinate represent the total score on two pictures at each level of stimulus-relevance.

Investigation of Individual Pictures

In order to further study the interrelationship of drive, inhibition and stimulus characteristics, pictures were analyzed individually. The *n* Sex scores elicited by each picture, percentage of sexual imagery (number of *n* Sex responses scored 1 to 5), mean sexual imagery scores, range and mean weight of sex imagery scores considering only scores greater than zero for each picture are presented in Appendix G.

The *n* Sex score as close to the medium as possible for the pooled *Ss* was selected for each picture. The cutting points were as follows: Pictures 1, 2, and 3: 0-1; Picture 4: 1-2; Picture 5: 2-3; Picture 6: 4-5. The number of *Ss* above these points for each of the three levels of drive pooled across levels of inhibition (*N*=40 per group) is presented in Tables 3 through 8, respectively. A summary of chi square values is presented in Table 9. Here it can be seen that although none of the relationships are significant, there is a strong tendency (10% level) for an increase in *n* Sex scores to occur with increase in drive for the higher stimulus-relevant pictures, 4 and 6. There is also a slight tendency (20% level) in the same direction for Picture 1, a picture of low stimulus-relevance. In addition, it can be seen from the tables that *n* Sex scores for all pictures either increase or are equal but do not decrease from low to high-drive.

In order to examine the effects of inhibition on stimulus-relevance, the number of *Ss* (*N*=60 per group) of low and high inhibition pooled across levels of drive who responded with sexual

Table 3

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 1 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	7	7	8	22
	High	2	6	8	16
	Pooled Drive	9	13	16	

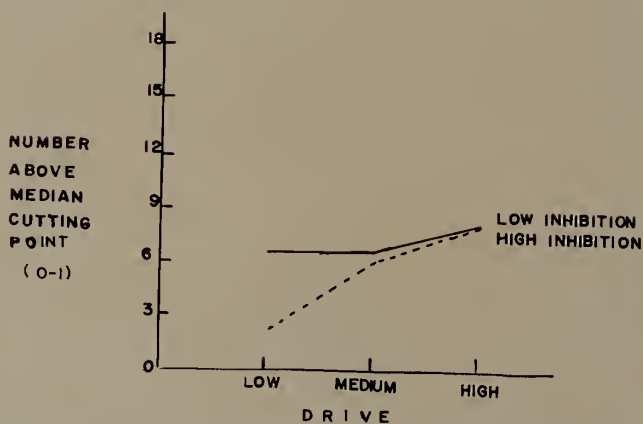


Fig. 9. Thematic sex responses as a function of drive and inhibition for picture 1.

Table 4

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 2 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	6	5	3	14
	High	3	1	6	10
	Pooled Drive	9	6	9	

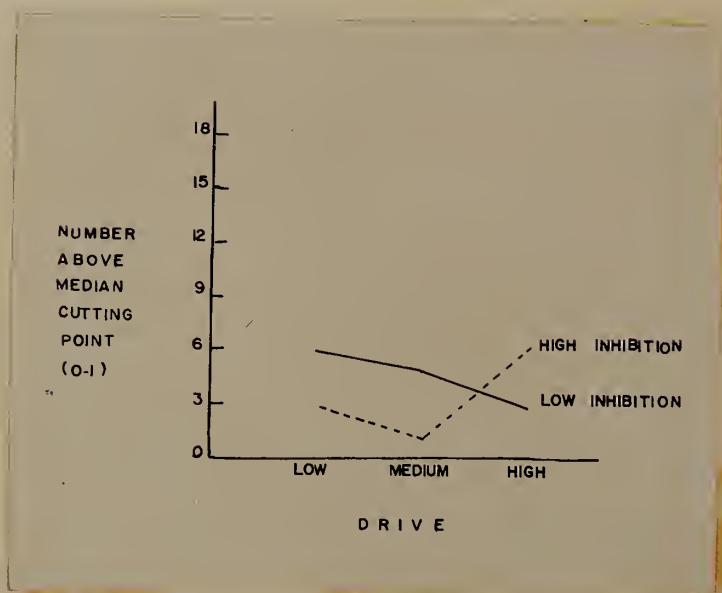


Fig. 10. Thematic sex responses as a function of drive and inhibition for picture 2.

Table 5

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 3 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	17	15	16	48
	High	13	12	14	39
	Pooled Drive	30	27	30	

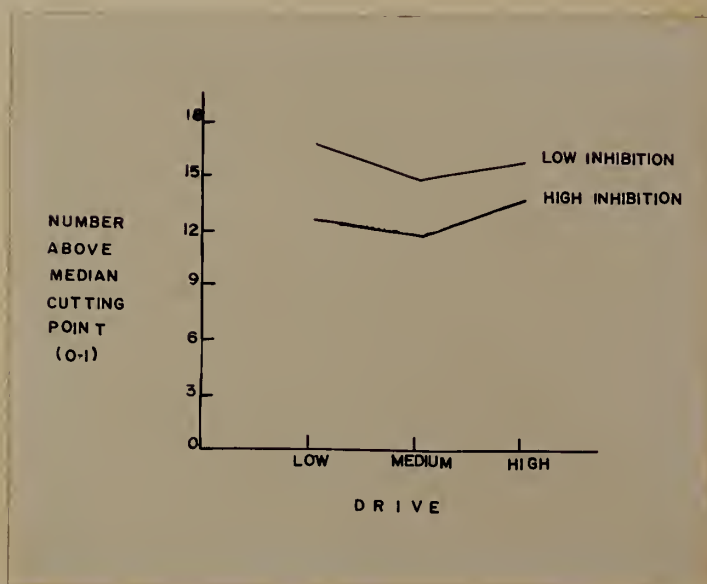


Fig. 11. Thematic sex responses as a function of drive and inhibition for picture 3.

Table 6

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 4 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	8	8	15	31
	High	5	10	8	23
	Pooled Drive	13	18	23	

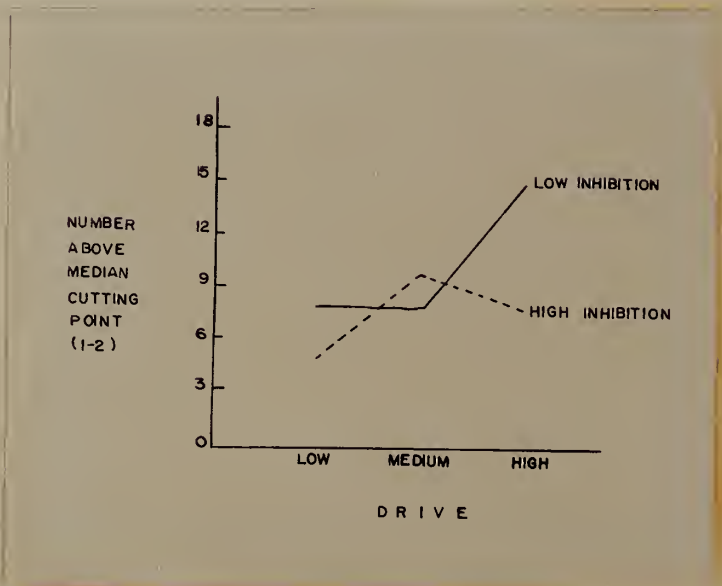


Fig. 12. Thematic sex responses as a function of drive and inhibition for picture 4.

Table 7

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 5 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	12	14	14	40
	High	5	7	9	21
	Pooled Drive	17	21	23	

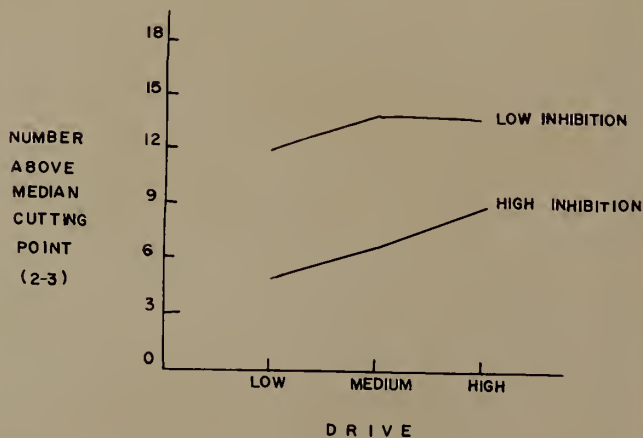


Fig. 13. Thematic sex responses as a function of drive and inhibition for picture 5.

Table 8

Number of Ss Above Median Cutting Points on
n Sex Scores for Picture 6 (N=20)

		Drive			Pooled Inhibition
		Low	Medium	High	
Inhibition	Low	7	4	12	23
	High	5	8	9	22
	Pooled Drive	12	12	21	

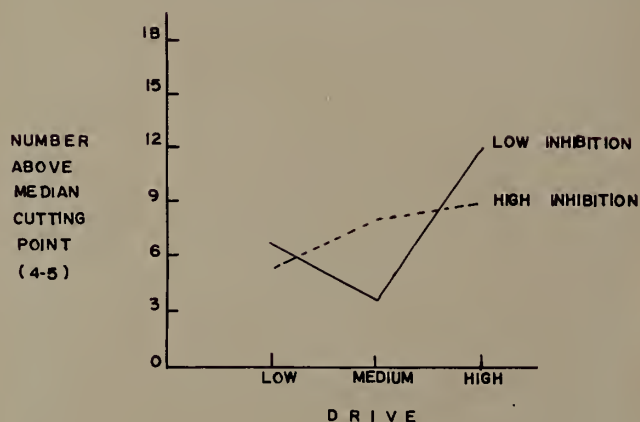


Fig. 14. Thematic sex responses as a function of drive and inhibition for picture 6.

Table 9

Summary of Chi Squares for Individual Pictures

	df	Pictures					
		1	2	3	4	5	6
Total	5	5.85	6.25	4.38	11.31	14.18	8.85
Drive	1	3.80	.95	.74	5.06 [†]	1.87	5.76 [†]
Inhibition	2	1.40	2.32	3.40 [†]	2.14	12.04**	.94
Interaction	2	.65	2.98	.24	4.11 [†]	.27	3.08

** Significant at 1% level

[†] Significant between 5 and 10% level

responses above the median cutting points for each picture was determined. In Tables 3 through 8 it can be seen that there are tendencies for inhibition to be associated with decreased sexual responsivity in all pictures. The chi square values for these relationships are presented in Table 9, where it can be seen that only for Picture 5, a picture of high stimulus-relevance, is the relationship significant (1% level). However, for Picture 6, the picture of strongest sexual-relevance, there is almost no difference between levels of inhibition. Pictures 2 and 3 approach significance (between 10% and 20% level). It may be concluded that sexual-relevance of the stimulus is not in itself a critical factor in determining the effects of inhibition.

Further analysis consisted of an investigation of interaction of drive and inhibition upon thematic sexual responses. For each level of drive the number of low-inhibition and high-inhibition SS (N=20 per group) above the cutting points was determined (See Tables 3 through 8). Results analyzed by chi squares called for a triple order interaction proposed by Sutcliffe (1957), Model 2b, in which values for drive and inhibition were subtracted from each total. A summary of chi square values for these interactions is presented in Table 9. Here it can be seen that none of the interactions are significant, although Picture 4 approaches significance (10% level). The direction of these relationships is presented in Figs. 9 through 11. It can be seen that the tendencies are no more consistent for pictures within the same level of stimulus-relevance than for pictures in different levels of stimulus-relevance. How-

ever, a second analysis carried out omitting the questionable low-drive group yielded a significant drive \times inhibition interaction effect for Pictures 2, 4, and 6 (5% level). In Fig. 10 it can be seen that for Picture 2 there is a direct relationship between thematic sexual responses and induced drive under conditions of high inhibition and a reverse relationship under conditions of low inhibition. On the other hand, for Pictures 4 and 6, as indicated in Figs. 12 and 14, respectively, it can be seen that there is a direct relationship between thematic sexual responses and induced drive under conditions of low inhibition and a lesser or inverse relationship under conditions of high inhibition. In other words, the nature of the interaction is opposite for Picture 2, on the one hand, and Pictures 4 and 6, on the other hand.

Thematic Sexual Guilt Responses and Inhibition

It was predicted that over all levels of drive there would be a direct relationship between experimentally induced inhibition and thematic sexual guilt responses. To test this, a t-test was used. Using all Ss, the mean thematic sexual guilt score for Ss under high-inhibition was 20.22, and for Ss under low-inhibition 18.10, which is in the predicted direction. However, the difference is non-significant ($t=.75$). Leiman and Epstein (in press) have pointed out that Ss producing many thematic sexual responses have greater opportunity for obtaining high scores on guilt related to sex than Ss producing few sexual responses. Accordingly, a second t-test was computed in which inhibition groups were balanced on total n Sex scores. At each of three drive levels, low-inhibition Ss were matched on an

individual basis with high-inhibition Ss obtaining the same n Sex scores. As the result of balancing for n Sex, the N for each of the inhibition groups was reduced from 60 to 37 (low-drive: 12, medium-drive: 14, high-drive: 11). A t-test of 1.71 was obtained, which with 72 df is significant at the 5% point for a one-tailed test. The mean weighted thematic guilt score for high-inhibition is 23.45, whereas the mean weighted thematic guilt score for low-inhibition is 16.78, which indicates that the relationship is in the predicted direction. Thus, when thematic sex scores are held constant, the prediction is substantiated.

Discussion

Thematic Sexual Responses and Sexual Drive

It was predicted that across levels of inhibition, there would be a direct relationship between sexual responses on a TAT-type test and sexual drive. This prediction was generally substantiated. However, the finding that low-drive and medium-drive Ss produced almost identical n Sex scores was not anticipated and warrants consideration. The pictures used to induce the drive states were selected on the basis of representing three levels of sexual stimulation and no attempt was made to equate the intervals between them. One possibility is that the stimuli used for the low-drive groups (pictures of fully attired ordinary women) were not sufficiently different from the stimuli used for the medium-drive groups (scantily attired "pin-up" type pictures) to arouse differences in sexual drive. An attempt to check this by comparing the initial ratings of the pictures made by the Ss in the pre-experiment was non-revealing, as little difference was found among all three sets of pictorial stimuli, probably due to an "anchoring" effect resulting from the Ss viewing only the pictures in a particular set, and by the instructions that the pictures were all of fairly attractive women and Ss should not be concerned if all ratings were high. Inspection of the pictures and the unanimous ratings of the judges does not make it likely that the low-drive and medium-drive stimuli are so similar as to result in similar sexual arousal. On the contrary, the nature of the pictures (see Appendix A) would suggest that there is a greater difference between the low and medium pictures

than between the medium and high ones. A more probable explanation for the similarity in sexual responding for low and medium-drive is suggested by the finding that the relationship of n Sex to drive for the low-inhibition group was u-shaped as a result of the low-drive group producing stronger sexual responses than the medium-drive group. This unanticipated finding can be accounted for if it is considered that for the low-drive, low-inhibition group there is an apparent discrepancy between the instructions received and the stimuli presented. It will be recalled that the S_s were told by an "informal", young male experimenter that they were going to participate in a study on the determinants of "sexual attractiveness" and their task was to rate "sex appeal". In addition, they were told that they need not participate in a study of sex if they did not wish to, and that while rating the pictures they should not feel "moral restraint". It was suggested that they make comments about the girls' "breasts", how passionate they thought the girls to be, etc. It appears probable that with a set established that they were to view risqué pictures, the presentation of slides of ordinary women was disappointing, and possibly drive may have been increased as a result of frustrated expectancies. The same would not apply to the high-inhibition group, where a uniform relationship was found between sexual responding and drive for all three drive levels, as the attitude of the experimenter and the instructions were appropriate to the drive-stimuli utilized.

Due to the similarity of the two studies, the results of the present study can be compared with the findings of Clark (1952,

1955), who reported that an experimental group (high-drive) produced less sexual responses than a control group (neutral). One possibility for the differences in findings in Clark's study and the present one is that, as has already been pointed out, Clark's procedures and instructions facilitated inhibition in the drive-condition only. In Clark's control group, which was presented neutral pictures (landscape scenes, architecture, etc.) prior to taking the TAT, the inhibitory set was not associated with sexual cues whereas in the experimental group it was. Since only two groups were used it was not possible to separate the effect of set-produced inhibition from drive-arousal, i.e., the decrease in sexual responses of the drive-aroused group was a decrease relative to the control group only, and the control group had been tested under conditions which differed in inhibitory set as well as drive-arousal. Another factor which may have functioned to produce the differences in findings is the quite probable differences in the sample of Ss utilized in the two studies with regard to socio-economic class. In the present study the Ss were approximately evenly divided between the lower and middle socio-economic classes. Although no data are available for Clark's sample, it would appear safe to assume that undergraduates at Yale University are mainly from the middle and upper socio-economic classes. The importance of Ss socio-economic class in determining the expression of culturally restricted drives on the TAT is indicated by a study conducted by Mussen and Naylor (1954). They hypothesized that overt aggression is subject to less punishment in lower class Ss than in middle class ones, and therefore lower

class Ss should be less anxious over behaving aggressively, and less apt to inhibit aggressive behavior. In support of the hypothesis, they found a direct relationship between behavioral and TAT hostility in a lower class group whereas studies using middle-class groups have generally reported an absence of relationship. Socio-economic class is also an important factor in the expression of sex, as indicated by Kinsey's (1948) study of male sexual behavior. Single males in the lower socio-economic classes are reported to have a greater frequency of total sexual outlet and be less inhibited in their manner of sexual expression, e.g., intercourse, than males in the higher socio-economic classes. Kinsey (1948) concludes his findings on sexual behavior and attitudes in the different socio-economic classes by stating:

"The upper level rationalizes on the basis of what is right and wrong. For this group, all socio-sexual behavior becomes a moral issue. Morality and sexual morality become more or less synonymous terms. Many persons at this level believe that there are few types of morality which are more enormous than sexual morality." (p. 384)

"Lower social levels, on the contrary, rationalize their patterns of sexual behavior on the basis of what is natural or unnatural. Pre-marital intercourse is natural, and it is, in consequence, acceptable. ... There are some individuals at lower levels who do see moral issues in sexual behavior, but by and large even they recognize that nature will triumph over morals. They may "know that intercourse is wrong", but "they expect to have it anyway, because it's human and natural to have it." (p. 385)

Taking Clark's findings into account it can be concluded that
EFFECTS OF
 guilt and inhibition can obscure the α drive, but where guilt is relatively low there is a direct relationship between experimentally induced drive and thematic sexual responses.

Thematic Sexual Responses and Inhibition

It was predicted that over all levels of drive, there would be an inverse relationship between sexual responses on a TAT-type test and inhibition. This prediction was substantiated. This finding is in accord with a study by Mussen and Scodel (1955), where it was found that sexual stimulation in the presence of an authority figure resulted in greater inhibition of thematic sexual responses than was the case in a permissive situation. Thus, it may be concluded that one of the factors necessary for an understanding of thematic expression of a culturally taboo drive is the total situational context of the administration of the test, which may function to enhance or reduce inhibitory tendencies operating within the individual.

Thematic Sexual Responses as a Function of the Interaction of Drive and Inhibition

A third prediction was that groups relatively high in inhibition would not demonstrate as marked a relationship between sexual drive and thematic sexual responses as would groups relatively low in inhibition. The interaction of drive x inhibition was not found to reach statistical significance. As has been discussed previously, it is probable that the relatively strong sexual responding of the low-drive, low-inhibition group was an artifact of the discrepancy between the instructions these Ss received and the drive stimuli employed. Since there was a strong suggestion that the high n Sex responses in one of the low-drive conditions was a function of a factor which did not operate in other experimental groups, an analysis of variance was carried out without the low-drive group.

Under these conditions the results approached significance in the predicted direction. The tendency for groups relatively high in inhibition to demonstrate a less marked relationship between drive and sexual responses than groups relatively low in inhibition is in accord with findings by Leiman and Epstein (in press) and Leiman (1961) who investigated thematic sexual responses in relation to self-reported sexual behavior and guilt. They found, at least for certain conditions, that Ss of high guilt produced weaker thematic sexual responses as drive increased, in contrast to Ss of low guilt, who demonstrated a direct relationship between thematic sexual responses and drive. Further support for an interaction of inhibition and drive is found in the difference in findings between the present study and the one by Clark (1952). As has previously been pointed out, Clark's finding that sexual arousal resulted in a decrease in thematic sexual responses while the present study indicates sexual arousal increases thematic sexual responses may be accounted for by the assumed differences in sexual guilt as a function of socioeconomic level. All in all, it may be concluded that guilt can not only obscure the relationship between drive and thematic responses, but can invert it.

Stimulus-Relevance

It was predicted that pictures of low relevance would discriminate among levels of drive more effectively than pictures of high relevance, while pictures of high relevance would discriminate among levels of inhibition more effectively than pictures of low relevance. Neither prediction was substantiated. Analysis of individual

pictures indicated a general tendency for drive to increase thematic sexual responses across levels of stimulus-relevance and for inhibition to decrease thematic sexual responses across levels of stimulus-relevance.

One explanation for the finding that drive increased sexual responding across levels of stimulus-relevance and inhibition depressed sexual responding across levels is that the conceptual model failed to predict thematic projection as related to stimulus-relevance. In line with this, Epstein and Fenz (in press) speculate that, "it may well be that the conceptual model fails to predict conflict through an overproduction of relevant responses at the low end of the stimulus-dimension and an underproduction at the high end, as the response tendencies combine into one overall net effect across the dimension."

An attempt was made to arrive at some tentative conclusions as to effective stimulus-characteristics by comparing the results in the present study with those in a study by Leiman (1961) which used most of the same pictures. Leiman, who investigated thematic sexual expression in relation to self-reported sexual behavior and guilt, found that a picture of low stimulus-relevance tended to discriminate between levels of drive and pictures of high stimulus-relevance between levels of guilt. However, in the present study, the pictures of high relevance were generally better measures of drive than the pictures of low relevance. With regard to guilt and inhibition, while the greatest differentiation of inhibition in the present study was found with a high relevant picture, it was one that failed to

discriminate in Leiman's study. Moreover, the high relevant picture that best measured guilt in Leiman's study, measured only drive in the present study. In the present study, it was further found that a picture of high and medium relevance best measured drive under conditions of low inhibition, but that under high inhibition the relationship was obscured or reversed. However, on a low relevant picture, drive was found to be directly related to thematic responses under high inhibition and inversely related under low inhibition. This latter finding can be understood if it is assumed that Ss under the high drive and high inhibition are in conflict and accordingly follow the conflict model. All in all, it is again evident that the effect of drive on thematic responses is determined by inhibition.

A consideration that may account for the differences in results of the two studies is that when drive and inhibition are externally manipulated, as was the case in the present study, sexual drive is more readily recognized and labelled than when the drive-cues are produced by a gradual build up of an inner state, as in Leiman's measure. It can be assumed that conscious recognition facilitates inhibition. The higher frequencies across drive levels of sexual responses to the low pictures in the present study, as compared to Leiman's study, suggests the operation of a set effect in the present study. This is particularly well illustrated in Picture 1 where 32% n Sex scores were obtained in the present study as compared to 18% in Leiman's study. It may well be that the combined set effect produced by the instructions, sexual stimuli and the ratings for sex appeal usurped the influence of drive on the low relevant pictures.

External set would not exert as great an effect on the high relevant pictures as they produce their own set effect and responses vary not according to whether sex enters, but how sex is handled when it does enter. One may speculate that for pictures of high relevance under a relatively consciously experienced drive, Ss express the drive to the degree to which they find it acceptable. In this regard, Leiman found that guilt, as measured by a self-report questionnaire, was related to performance on high pictures. The method of inducing drive in the present study and Leiman's criterion of guilt would seem to similarly relate to relatively overt feelings or attitudes. The importance of the level of consciousness at which an index of drive is obtained has been indicated in two studies (Leiman and Epstein, in press; Leiman, 1961) which reported different findings for different indices of drive. Leiman's measures of drive (rate of orgasm, time since last orgasm, and rate of nocturnal emission) would appear to be more subtle than the experimental induction of drive in the present study. This would suggest the hypothesis that the relatively conscious attitudes and feelings are best measured by ^{high} relevant pictures whereas less conscious drives are best measured by low relevant pictures. This hypothesis would explain the finding in the present study that only among pictures of medium and high relevance was the expression of sexual responses strongly related to sexual drive. The fact that one of the pictures of high relevance measured inhibition may be due to its special feature of relatively high ambiguity, which readily allowed for an avoidance of its sexual content in a manner that was not inappropriate. Thus it yielded the

largest dispersion of n Sex scores among the six pictures. It may be tentatively concluded that stimulus characteristics other than stimulus-relevance must be considered in conjunction with the nature of the drive and the total situation¹ context of its arousal in understanding thematic projection. The fact that the same high and low pictures do not always work in the same way may indicate that, at present, the best procedure is to use several pictures at each level of stimulus-relevance in the hope that if one picture does not pick up an effect a different one may.

Thematic Sexual Guilt Responses and Inhibition

It was predicted that over all levels of drive there would be a direct relationship between experimentally induced inhibition and sexual guilt responses on a TAT-type test. When Ss were balanced for TAT n Sex the prediction was confirmed. This is in contrast to the results of Clark (1952) who found a reverse relationship. However, Clark neglected to control for TAT n Sex in evaluating guilt, and since guilt could only enter in relation to sexual responses, his results very likely are an artifact.

Summary

The purpose of this study was to investigate the effects of experimentally induced sexual drive and inhibition on sexual and guilt responses to a TAT-type test consisting of pictures varying in stimulus-relevance. Three groups of subjects (40 Ss in each group) were presented three different sets of slides of females, representing three levels of sexual stimulation. Half of each group was stimulated under conditions designed to maximize guilt and inhibition and half under conditions designed to minimize guilt and inhibition. Following this, all subjects were presented a TAT-type test made up of pictures arranged along a gradient of stimulus-relevance in regard to the sexual drive. Weighted scores were obtained for thematic n Sex and thematic sexual-guilt. The major findings may be summarized as follows:

1. Across all pictures, a significant direct relationship (1% level) was found between sexual drive and thematic sexual responses.
2. Across all pictures, a significant inverse relationship (1% level) was found between experimentally induced inhibition and thematic sexual responses.
3. Inhibition was found to modify the relationship between drive and thematic sexual responses on certain pictures. On pictures of medium and high relevance a direct relationship was found between thematic sexual responses and drive when inhibition was low while the relationship was obscured or reversed when inhibition was high. Completely opposite relationships were found on a picture of

low relevance.

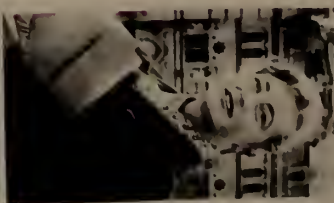
4. A significant direct relationship (5% level) between experimentally induced inhibition and thematic sexual-guilt responses was found only after Ss were balanced on TAT n Sex.

It was concluded that the relationship between drive and thematic sexual responses is complicated by the effects of inhibition, stimulus characteristics and the nature of the drive and the total situational context of its arousal.

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Appendix A
Drive Stiruli

HIGHMEDIUMLOW

Appendix B

TAT-Type Pictures



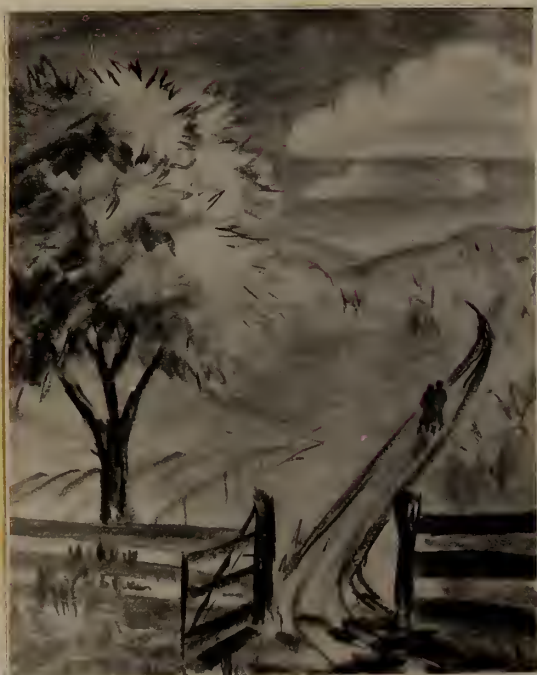
1



2



3



4



5



6

Appendix CInstructions for Thematic Test

This is a test of your creative imagination. A number of pictures will be projected on the screen. You will have twenty seconds to look at the picture and then 4 minutes to make up a story about it. Notice that there is one page for each story.

To insure a complete story, include the following:

- 1) What has led up to the scene
- 2) What is happening, and what are people feeling and thinking
- 3) What will the outcome be

Do not merely describe the pictures, but try to make up interesting and vivid stories about them. Make up a new story for each one rather than continuing a story from a previous picture. Please do not tell humorous stories. Tell the story in the third person rather than as your own experience.

Appendix DFrequency Distribution of Father's Occupation
for the Six Groups

	1	2	3	<u>Group</u> 4	5	6
Underworld						
Day labor	1			1		
Semi-skilled labor	3	6	5	3	4	3
Skilled labor	5	3	5	4	5	6
	<hr/> 9	<hr/> 9	<hr/> 10	<hr/> 8	<hr/> 9	<hr/> 9
Lower white collar	1	2	1		3	1
Upper white collar	4	3	6	8	7	5
Professional	4	3	3	3	1	5
	<hr/> 9	<hr/> 8	<hr/> 10	<hr/> 11	<hr/> 11	<hr/> 11
Business executive	2	1		1		
Extremely wealthy						
	<hr/> 2	<hr/> 1		<hr/> 1		

Appendix EExamples of Mean Weighted n Set Scores Given
to Stories for Individual PicturesPicture 1

Weighted score of 1: "The boy appears to be deep in thought, perhaps an argument or a disappointment has compelled him to sit on this dock overlooking a pond. The boy probably lost his girl as the result of a misunderstanding. He is now thinking and trying to discern who was wrong. The next scene would probably show him talking to his girl and reasoning things out followed by a smile and then all is well again."

Weighted score of 2: "Undoubtedly, love is one of the prime drives in all people. It appears that when one's love is absent he will often go to a quiet and possibly somewhat picturesque place where he has been with his love before. At this place he thinks of his love far away and also recalls fond memories of experiences that took place near, say a pond. Most likely he will see his love again and his love may be deeper than before her absence."

Weighted score of 3: "The boy on the wharf is spending his day off from his job at the summer resort rather leisurely. As he sits he thinks about his girl back home relating it with the fun they had had the past school year. He does not meditate upon this for long because his mind wonders over the horizon by the mountains where he had the girl last night. She was a beautiful girl of dark complexion and dark hair. Her body was well proportioned and that was his major interest in her."

Weighted score of 4: No story.

Weighted score of 5: No story.

Appendix E, continuedPicture 2

Weighted score of 1: "The fellow has just finished a cigarette and is returning to a dance. This is the reason for his being dressed in a suit. He is wondering which girl he should take home and how faraway she lives. But by the time he goes back in to ask her to dance the girl has either left with someone else or is being closely watched by a new partner. The boy in the picture forgets the matter after brooding for a bit and goes out for a few beers with the boys."

Weighted score of 2: No story.

Weighted score of 3: "This boy is going into the Dean's office, at the Dean's summons. This boy has been caught with a girl in his room. The boy is going to be thrown out of school. This is unfortunate as the reason he was going to school was to provide a decent life for the girl that was caught in his room."

Weighted score of 4: No story.

Weighted score of 5: "A boy has just seen something he did not want to see. He walked in a bedroom and saw his older brother making love in a nude state to his girl friend. The boy has just come from a party himself, of course for younger children and geared to a much less mature level. He is shocked to find his brother in the den with the lights out and leaves the room not knowing what to think. Should he be disgusted or is this normal?"

Appendix E, continuedPicture 3

Weighted score of 1: "This man was supposed to meet a beautiful girl in the park. The man is probably married because it seems that the hour and place of meeting imply secrecy. She's very late and the man sitting at the bench is very annoyed. He will probably create a scene when she arrives."

Weighted score of 2: "This young man has just seen a girl friend of his walk by and he glances at his watch to see if he will be late in getting home to supper. He finally decides to catch up with her and asks her for a date that Saturday night. Saturday night arrives; he goes on his date and he finds out he has a liking for this girl. Therefore, when he takes her home, he asks for a date next weekend. Thus, the start of a love affair is caused."

Weighted score of 3: "G. had a date this Saturday evening, but as he approached his girl's house, he saw her driving away in another car. He became thoroughly dejected for awhile and went to a place overlooking the water, which had become their favorite "make-out" spot. He sat dejectedly for a long while and tried to figure out what had caused his girl to do this after they had been going steady for almost a year. He concluded that everything had been her fault and she was not worth the trouble. He was concerned for about a week afterwards, but after his first date he forgot her."

Weighted score of 4: "Bill is married to a wealthy but quite frigid socialite. His love life has been miserable. In desperation he has gotten quite friendly with one of the girls in the office he works in. He has made a date to meet this girl in the local park because he does not want to pick her up at her place for fear of gossip. She is late for the date. He is thinking that maybe she changed her mind. She finally comes and the affair blossoms and continues for months. His wife finds out accidentally. The fact forces her into seeing a psychiatrist. She is cured and forgives him."

Weighted score of 5: No story.

Appendix E, continuedPicture 4

Weighted score of 1: "A Sunday afternoon and a young unmarried couple are walking in the country. They are walking down a dirt road and are just talking happily and aimlessly. They haven't a care in the world right now. Both have forgotten their worries and are willing to accept the world the way it is with each other. They soon will go or head for home sad that the weekend is over and that work faces them the next morning. Both agree that they will see each other soon, and they part, such is life."

Weighted score of 2: "There has just been a square dance at a local barn and this man and woman are walking home together. They have known each other for many months but are just realizing their deep love. As they walk in the moonlight toward home they make the decision to get married. They will tell their parents about it the next day but they object to their marriage because of the young peoples' age. They get married, but their marriage ends in tragedy."

Weighted score of 3: "The couple had a lot to discuss about the conflicts that were arising at home. His mother was against their marriage because of religious factors and it was her worries that was causing all the trouble. The couple needed a few minutes to think over what they should do so they headed up the mountain to their favorite spot. They wondered, once there, if it would really work. Were they too young? Would they get involved if they waited and most of all, could they wait for each other? Night was coming and they clutched each other and kissed."

Weighted score of 4: "The long endless road to nowhere is being traversed once again by a young couple, who because of nature and the natural tendency to indulge in sex, were caught in the web of guilt and society. Their parents, wealthy land owners and high society people, have failed to provide leadership and welfare for the two people who got themselves in trouble. Like most couples starting off this way, their lives will deteriorate and they will eventually be extremely unhappy. There is no future for such couples."

Weighted score of 5: "As Howie and Annette go up the path into an area of woodland, they are both thinking what way will be the best to attract each other into a action of sexual intercourse. They are in a world all of their own, with no one watching, their perfect freedom. This is their big chance. You bet your life they will take advantage of it. And now they come back down the path weary and worn out. They have achieved what they both wanted. They possess a feeling of achievement, yet of sin also, however they did what restraint couldn't hold back."

Appendix E, continuedPicture 5

Weighted score of 1: "As Emily and her husband rest on the trunk of a tree in their backyard, they are thinking back to their old college days and how they were such children in their actions. Now owning land of their own, they see a bright future ahead. They are happily married and living on land of their own. No longer does Emily think back to her times of harsh upbringing, etc. for she has found a new world, as well as her husband."

Weighted score of 2: "The young man had taken his girl out for a Sunday afternoon drive and they stopped and went for a short walk. They are laying, talking about foolish things that one talks about when in love. He is trying to get up the courage to propose, but he just can't quite bring himself to it. They have no cares for these few hours that they are alone and free. She also likes him very much. He will propose that night, but not in the afternoon."

Weighted score of 3: "Who could ask for more? All his life Frank was in love with the girl next door. He had dated Patty often but she always looked upon him as a "big brother." In fact she used to call him that. This afternoon Frank asked Patty if she wanted to go for a ride in his new car. "O.K. Big Brother" said Patty, "let's hit the road." He knew the right spot and took Patty up there. They sat down and rested on the beautiful green grass. Frank took Patty in his arms and kissed her. At first Patty was surprised but then she just melted in his arms. Then he knew that she would always be in his arms. "Big brother" would become "dear husband"."

Weighted score of 4: "On a hill after stopping their car to pick some flowers, a boy and girl sit down to have a cigarette and talk. The conversation switches from many things - marriage to old boy friends or girl friends to jobs - all the time the girl is cooing and teasing the man. He is asking her if she will be "his" girl and she doesn't quite know what to say. He leans down to kiss her and she hesitates. Soon she looks up into his eyes, nods her head and says yes, repeating things after each kiss."

Weighted score of 5: "She didn't know why, but somehow she felt she was ready for him. She knew the consequences of giving away her body, yet, strangely enough, she felt glad. He wanted her - so many times she had had to say no, even though she had wanted to give in. Something had always stopped her. But not today. She turned toward him and their eyes met. His eyes asked the question - she answered with a slow nod. In two years they would be married. Now, they belonged to each other."

Appendix E, continuedPicture 6

Weighted score of 1: "Joe is a farmhand. All day long he works in the fields on the mowing machine, cutting hay for the cows next winter. In the evening he is bushed. He comes home, takes a shower, eats and heads for his girl's house. This day, his girl, who lives alone since her parents had been killed the year before, was in a serious mood and Joe, seeing that she was thinking of her parents, was trying to take her mind off of it."

Weighted score of 2: "These are two sweethearts. The guy was away in the war when he got hurt and they brought him back to a hospital. His girl, still faithfull to him visits him every day. In the picture the guy from his bed is expressing smoothly his feelings to her by kissing her eyes."

Weighted score of 3: "As he kissed her behind the ear he whispered over and over again that he loved her. As the two clung to each other in a tight embrace, maybe their last, she could no longer control her emotions and cried with such violent sobs that her entire body shook. Bill had no longer than a month to live; why did it have to happen to them, now that they were both young and ready for marriage and a happy life together."

Weighted score of 4: "Her parents are away and he finds himself at her house on a regular date. Since they are really alone for the first time they get carried away with their lovemaking. While in a passionate embrace in her father's bedroom, her father comes and catches them. He throws them both out of the house and tells her to never return again."

Weighted score of 5: "These two people are both students in Madrid. The boy goes to a military school and he's bothered by the strict discipline there. The young woman goes to a school run by nuns and is also bothered by discipline. They meet one day and after awhile they have regular intercourse. This is just one of the times they are together. This goes on for a while but soon the young man must go to war and the affair is ended."

Appendix F

Examples of Mean Weighted Thematic Guilt Scores

(Due to the lack of many scores, examples of weightings 1, 3 and 5 for external, internal and indirect guilt respectively are given.)

External Guilt

Weighted score of 1: "Tom Jones had met Ellen Smith at a party and was with her the whole night. After the night was over they both realized that they really liked each other. There was only one problem with their relationship; Tom was from a family of average income and Ellen's father was president of a big firm in their town and quite wealthy. When Ellen told her father about Tom he told her not to see him again. They have been meeting secretly and Tom can't understand where Ellen can be; she is one hour late. It turned out all right and Tom and Ellen eventually started seeing each other with her father's permission."

Weighted score of 3: "The man is on a business trip. He manages to pick up this young attractive girl. He takes her to his hotel room and then proceeds to make up for the lost love he has at home. His wife is constantly nagging him. This girl makes her living by being in the right place when the lonely business men are there. The man's wife happens to be checking up on him this time and has them both caught in the act by the police. She sues the girl and leaves her husband. The husband comes back after a few months and life is different. His wife changes."

Weighted score of 5: "Here two lovers walk in a country lane. They have met during the summer and their relationship has continued into the fall. As they walk down the lane they will meet an individual who will bring up a ghost of the young man's past. This incident will result in a quarrel, in which both part. She will want to forgive him but because of social pressure cannot bring herself to it. In the end, after a few weeks time, he will go away. At a still later time, she will have become pregnant, and will not be able to find him and in turn become socially ostracized in her small home town."

Internal Guilt

Weighted score of 1: "Two college students have just finished picnicing. The young man and his date now recline on the ground, he looks at her and is inticed to kiss her but he is afraid she will not return his affection. The outcome will be that through his shyness he will not kiss her and therefore never know what she felt toward him."

Appendix F, continued

Weighted score of 3: "A boy has been away for a long time and both he and his girl have missed each other very much. Their letters had become more and more passionate. When he finally comes home he goes to her house and her parents are just leaving. They head for the couch and the next thing they know it's all over. They spend the next couple of weeks sweating it out and when her period finally comes they vow never to let it happen again."

Weighted score of 5: "As the two groped their way back to the road from their walk in the woods, shame and guilt filled their bodies. It had started out with only a kiss and then neither could hold back their pent up emotions. Karen had cried and told him that it would lead to this if they continued this constant necking."

Indirect Sexual Guilt

Weighted score of 1: "The couple are out for a walk to their favorite resting spot. They aren't together alone very often and find that by walking together and just being alone together gives them a great deal of satisfaction, for you see this is their last chance to be together this summer. Tomorrow she has to leave to go back to school."

Weighted score of 3: "Tom's wife, Jane, has just been in an automobile accident and was taken to city hospital where she is in fair condition. When Tom hears of this he rushes to the hospital to see his wife. As he walks through the door leading into her room he is thinking of nothing else but her physical condition. He remains by her side until she arouses consciousness and is relieved to know that she is progressing fine. Tom leaves and in a matter of a few days his wife will arrive home."

Weighted score of 5: "This couple have been in love for over five years, but their parents are against their marrying. They have been meeting secretly for some time, but they both realize that it can't go on this way and have to decide to either get married or stop seeing each other. They decide to run away and get married, but on the way home there is an auto accident and he is killed. She goes into a nunnery and lives miserably for the rest of her life until she is on her death bed. Then she accepts what God has sent to her and dies happily."

Appendix GFrequency distribution of n sex scores for all pictures (N=120)

n Sex Scores	Pictures					
	1	2	3	4	5	6
0	81	96	32	17	4	0
1	31	22	66	49	19	6
2	7	0	15	35	40	17
3	1	1	3	6	19	16
4	0	0	4	5	20	36
5	0	1	0	8	18	45

Information on independent pictures for all 120 Ss

	Pictures					
	1	2	3	4	5	6
Per cent sex imagery	32%	20%	73%	86%	97%	100%
Mean sex imagery score	.40	.25	1.01	1.64	2.72	3.81
Range of sex imagery scores	0-3	0-5	0-4	0-5	0-5	1-5
Standard deviation of sex imagery scores	.99	1.13	.89	1.29	1.40	1.22
Mean weight of sex imagery scores considering only scores greater than zero	1.23	1.25	1.38	1.91	2.81	3.81

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